Downloadable Handouts for participant to print prior to program

Please Print these out before starting the webcast.

Website Resources Handout – next slide

Administering Vaccines: Dose, Route, Site and Needle Size
http://www.immunize.org/catg.d/p3085.pdf

Recommended and Minimum Ages and Intervals Between Doses Table
http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/A/age-interval-table.pdf

Screening Questionnaire for Child and Teen Immunization
http://www.immunize.org/catg.d/p4060.pdf

Guide to Contraindications and Precautions to Commonly Used Vaccines
http://www.immunize.org/catg.d/p3072a.pdf

2011 Recommended Immunization Schedule for Persons Aged 0 Through 6 Years
http://www.cdc.gov/vaccines/recs/schedules/downloads/child/0-6yrs-schedule-pr.pdf

2011 Recommended Immunization Schedule for Persons Aged 7 Through 18 Years
http://www.cdc.gov/vaccines/recs/schedules/downloads/child/7-18yrs-schedule-pr.pdf

2011 Catch-Up Immunization Schedule
http://www.cdc.gov/vaccines/recs/schedules/downloads/child/catchup-schedule-pr.pdf

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Website Resources Handout

- **Website Resources Handout**
-
- Epidemiology & Prevention of Vaccine-Preventable Diseases (The Pink Book) http://www.cdc.gov/vaccines/pubs/pinkbook/default.htm
- Epidemiology & Prevention of Vaccine-Preventable Diseases (9 part educational series) http://www.cdc.gov/vaccines/ed/epivac/default.htm
- CDC Immunization Update (annual presentation highlighting current immunization issues) http://www.cdc.gov/vaccines/ed/imzupdate/default.htm
- Immunization: You Call the Shots (Web based training modules) http://www.cdc.gov/vaccines/ed/youcalltheshots.htm
- Vaccine Storage & Handling Toolkit http://www.cdc.gov/vaccines/recs/storage/default.htm
- Immunization Action Coalition -- IAC Express E-newsletter http://www.immunize.org
- Vaccine Safety Resources Handout http://www.immunize.org/vaccine-safety-resources.pdf

Immunizations 101 and Public Health Nursing

Sonya Moseley RN, BSN
Kentucky Immunization Program

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Objectives

- Describe 2 types of immunity
- List 2 major classifications of vaccines
- Distinguish between contraindications & precautions
- Define VAERS & list steps to report
- List the routes used for vaccine administration
- Identify eight documentation requirements
- Identify the importance of appropriate vaccine storage & handling
- Distinguish between recommended vs. required vaccines
- Identify valid, science-based immunization resources

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Before Vaccines…

…infectious diseases threatened the health and lives of tens of thousands of children and adults in the United States each year

In 1952 alone, **polio** paralyzed more than 21,000 people

Before 1985, **Haemophilus influenzae type b** (Hib) caused serious infections in 20,000 children each year

In the 1964-1965 epidemic, there were 12.5 million cases of **German measles** (rubella)

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Before Vaccines…

During the six years of 1940-1945, more than 1 million cases of **pertussis** (whooping cough) were reported, an average of 175,000 cases per year

In the 1920s, there were 100,000 to 200,000 cases of **diphtheria** and 13,000 – 15,000 deaths reported each year

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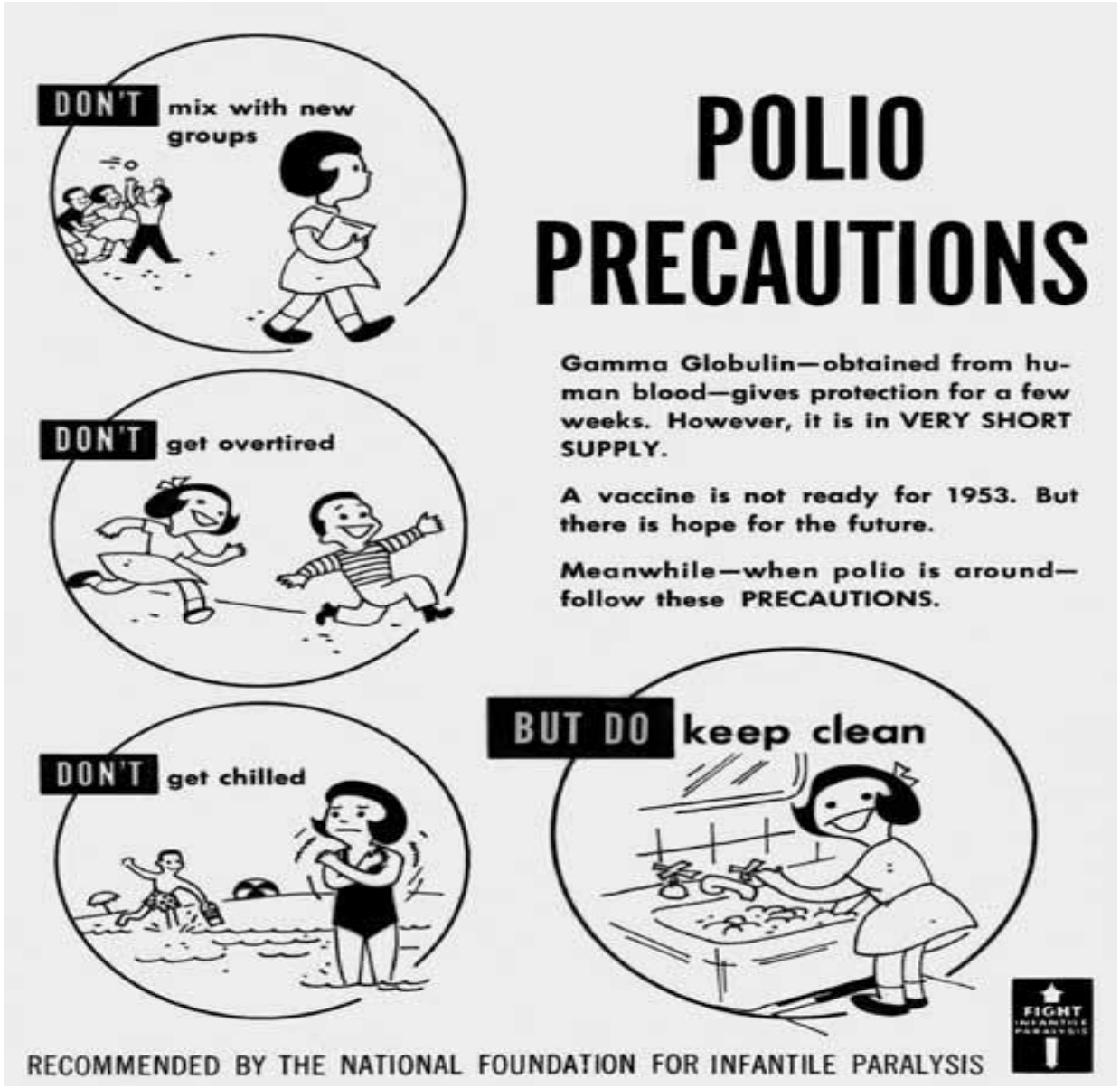
1953 Poster for Avoiding Polio



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Types of Immunity

Passive Immunity

- Protection transferred from another person or animal
- Temporary protection that wanes (disappears) with time, usually within a few weeks or months
- Examples: immune globulin from human sources, antitoxin produced in horses, maternal antibodies passed on at childbirth

Active Immunity

- Protection produced by the person's own immune system
- Usually permanent: many years or a lifetime
- Acquired in 2 ways:
  - Get the disease itself
  - Through vaccination

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Two Classifications of Vaccines

Inactivated

- Does not cause the disease from the vaccine
- Can be given to persons with weakened immune systems
- Adverse events mostly local reactions
- Require multiple doses

Live Attenuated

- Attenuated (weakened) form of "wild“ virus/bacterium
- Usually does not cause disease, but, if so, will be much milder
- Adverse events can be similar to a mild form of the natural illness
- Generally produce long lasting immunity with a single dose

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Inactivated Vaccines

- Diphtheria, Tetanus, Pertussis (DTaP, Tdap, DT, Td)
- Polio (IPV)
- *Haemophilus influenzae* type b (Hib)
- Hepatitis B (HBV)
- Hepatitis A (HAV)
- Pneumococcal Conjugate (PCV)
- Pneumococcal Polysaccharide (PPV)
- Meningococcal Conjugate (MCV)
- Meningococcal Polysaccharide (MPSV)
- Human Papilloma Virus (HPV)
- Trivalent Influenza Vaccine (TIV)

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Live Attenuated Vaccines

- Measles, Mumps, Rubella (MMR)
- Varicella (Chickenpox)
- Varicella Zoster (Shingles)
- Intranasal Influenza vaccine (LAIV)
- Rotavirus
- Yellow Fever
- Typhoid
- Oral Polio (not in U.S.)

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Upper and Lower Case Letters: What's the Difference?

- DTaP (for 6 weeks through 6 years)
- DT (for 6 weeks through 6 years)
- Tdap (one time dose for adolescents & adults)
- Td (for 7 years and up)

Upper case = more of that antigen in vaccine

Lower case = less of that antigen in vaccine

Check your vials very carefully to prevent mistakes.

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Combination Vaccines

- Pentacel (DTaP, IPV, Hib)- 6 weeks through 4 yrs
- Pediarix (DTaP, IPV, HepB)-6 weeks through 6 yrs
- Kinrix (DTaP, IPV)- 4 to 6 yrs
- Comvax (HepB, Hib)- 6 weeks through 5 yrs
- Proquad (MMR, Varicella)- 12 mo. thru 12 yrs

Know what your vaccine components are and what ages they are licensed for to prevent mistakes.

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Administering Vaccines

- Dose
- Route
- Site
- Needle Size

Administering Vaccines: Dose, Route, Site, and Needle Size

Vaccines	Dose	Route
Diphtheria, Tetanus, Pertussis (DTaP, DT, Tdap, Td)	0.5 mL	IM
***Haemophilus influenzae* type b (Hib)**	0.5 mL	IM
Hepatitis A (HepA)	≤18 yrs: 0.5 mL ≥19 yrs: 1.0 mL	IM
Hepatitis B (HepB) **Persons 11–15 yrs may be given Recombivax HB® (Merck) 1.0 mL adult formulation on a 2-dose schedule.*	≤19 yrs: 0.5 mL* ≥20 yrs: 1.0 mL	IM
Human papillomavirus (HPV)	0.5 mL	IM
Influenza, live attenuated (LAIV)	0.2 mL	Intranasal spray
Influenza, trivalent inactivated (TIV)	6–35 mos: 0.25 mL ≥3 yrs: 0.5 mL	IM
Measles, mumps, rubella (MMR)	0.5 mL	SC
Meningococcal – conjugate (MCV)	0.5 mL	IM
Meningococcal – polysaccharide (MPSV)	0.5 mL	SC
Pneumococcal conjugate (PCV)	0.5 mL	IM
Pneumococcal polysaccharide (PPSV)	0.5 mL	IM or SC
Polio, inactivated (IPV)	0.5 mL	IM or SC
Rotavirus (RV)	2.0 mL	Oral
Varicella (Var)	0.5 mL	SC
Zoster (Zos)	0.65 mL	SC
Combination Vaccines		
DTaP+HepB+IPV (Pediarix®) **DTaP+Hib+IPV (Pentacel®)** **DTaP+Hib (Trihibit®)** **DTaP+IPV (Kinrix®)** **Hib+HepB (Comvax®)**	0.5 mL	IM
MMR+Var (ProQuad®)	≤12 yrs: 0.5 mL	SC
HepA+HepB (Twinrix®)	≥18 yrs: 1.0 mL	IM

Injection Site and Needle Size

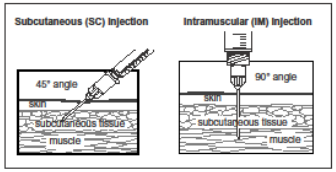
Subcutaneous (SC) injection
Use a 23–25 gauge needle. Choose the injection site that is appropriate to the person's age and body mass.

Age	Needle Length	Injection Site
Infants (1–12 mos)	⅝"	Fatty tissue over anterolateral thigh muscle
Children 12 mos or older, adolescents, and adults	⅝"	Fatty tissue over anterolateral thigh muscle or fatty tissue over triceps

Intramuscular (IM) injection
Use a 22–25 gauge needle. Choose the injection site and needle length appropriate to the person's age and body mass.

Age	Needle Length	Injection Site
Newborns (1st 28 days)	⅝"*	Anterolateral thigh muscle
Infants (1–12 mos)	1"	Anterolateral thigh muscle
Toddlers (1–2 yrs)	1–1¼" ⅝–1"*	Anterolateral thigh muscle or deltoid muscle of arm
Children & teens (3–18 years)	⅝–1"* 1"–1¼"	Deltoid muscle of arm or anterolateral thigh muscle
Adults 19 yrs or older		
Male or female less than 130 lbs	⅝–1"*	Deltoid muscle of arm
Female 130–200 lbs Male 130–260 lbs	1–1½"	Deltoid muscle of arm
Female 200+ lbs Male 260+ lbs	1½"	Deltoid muscle of arm

**A ⅝" needle may be used only if the skin is stretched tight, subcutaneous tissue is not bunched, and injection is made at a 90-degree angle.*



Please note: Always refer to the package insert included with each biologic for complete vaccine administration information. CDC's Advisory Committee on Immunization Practices (ACIP) recommendations for the particular vaccine should be reviewed as well.

Technical content reviewed by the Centers for Disease Control and Prevention, February 2009.

www.immunize.org/catg.d/p3085.pdf • Item #P3085 (2/09)

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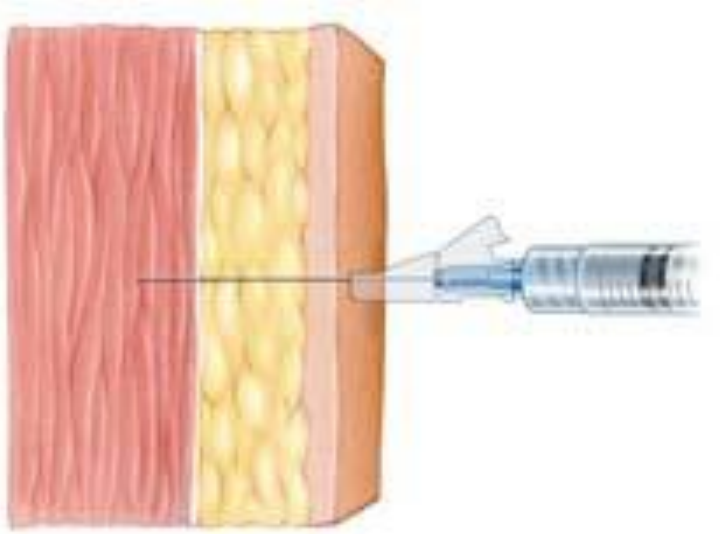
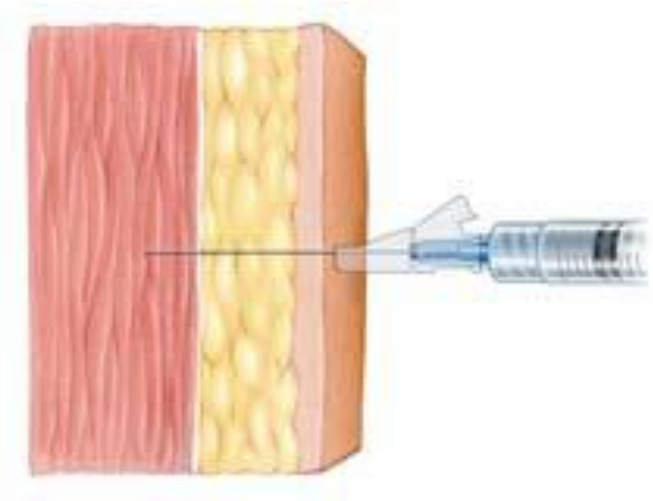
Intramuscular (IM) Injection

- Insert at a 90 degree angle
- 1-inch, 23 or 25 gauge needle
- For heavier or larger patients, use a 1 ½ inch needle
- Inject vaccine deep in the muscle for best results
- Anterolateral thigh or deltoid



Intramuscular (IM) Vaccines

- Diphtheria-Tetanus-Pertussis (DTaP, Tdap, DT, Td)
- *Haemophilus influenzae*, type b (Hib)
- Hepatitis A (HAV)
- Hepatitis B (HBV)
- Influenza (TIV)
- Meningococcal conjugate (MCV)
- Pneumococcal conjugate (PCV)
- Human papillomavirus (HPV)
- Pneumococcal polysaccharide (PPSV)*
- Inactivated Polio Vaccine (IPV)*



*can also be given SC

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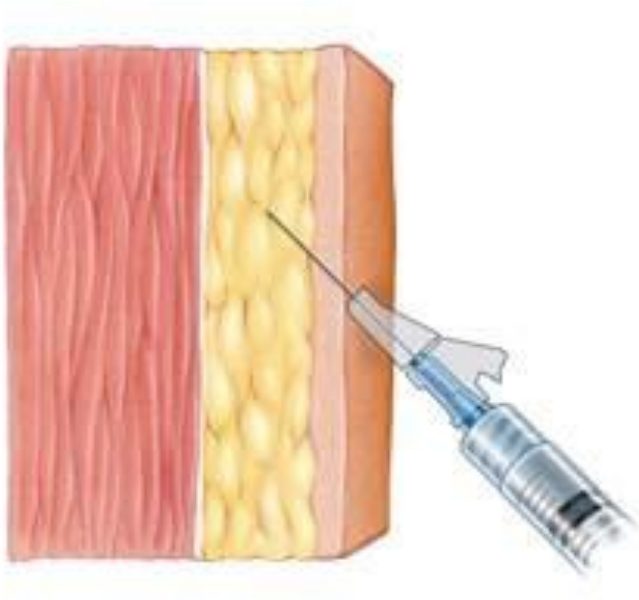
Subcutaneous (SC) Injection

- Insert at a 45 degree angle
- 5/8 inch, 23-25-gauge needle
- Inject vaccine into subcutaneous tissue
- Fatty tissue over anterolateral thigh muscle or fatty tissue over triceps



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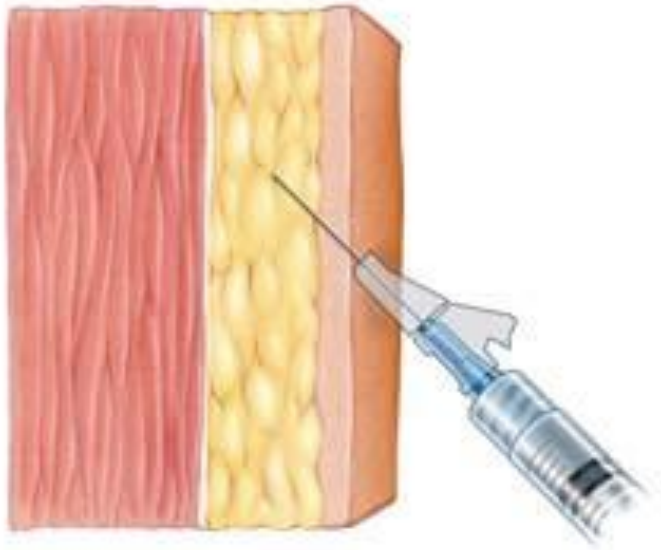
Subcutaneous (SC) Vaccines

- Inactivated Polio Vaccine (IPV)*
- Measles-Mumps-Rubella (MMR)
- Varicella (Chickenpox) vaccine (VAR)
- Herpes Zoster (Shingles vaccine)
- Pneumococcal polysaccharide (PPSV)*



*can also be given IM

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Other Routes

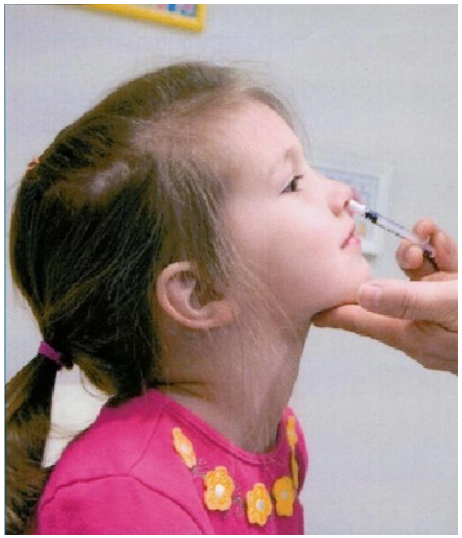
Intranasal Vaccines

- Live, attenuated influenza vaccine (LAIV)

Attenuated=weakened

Oral Vaccines

- Rotavirus



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Intervals Between Doses

(timing and spacing are 2 of the most important issues in the appropriate use of vaccines)

•DECREASING the interval between doses of a multi-dose vaccine may interfere with antibody response and protection.

•INCREASING the interval between doses of a multi-dose vaccine does NOT diminish the effectiveness or make it necessary to start series over.

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Timing & Spacing of Vaccines

Inactivated and Live Vaccines	Give on same day Or Give anytime before or after
Inactivated Vaccines	Give on same day Or Give anytime before or after
Live Vaccines (excludes oral live vaccine)	Give on same day Or Separate by 4 weeks (4 day grace does not apply)

Contraindications & Precautions

Contraindication--condition in the recipient that *greatly increases* the chance of a serious adverse reaction. (In general, vaccines should not be administered when contraindication condition is present)

Precaution--condition in the recipient that *might increase* the chance or severity of a serious adverse reaction, or that might compromise the ability of vaccine to produce immunity. Injury could result but less chance than with contraindication.

Screening Questionnaires

Patient name: _____ Date of birth: ____/____/____ (mo.) (day) (yr.)

Screening Questionnaire for Child and Teen Immunization

For parents/guardians: The following questions will help us determine which vaccines your child may be given today. If you answer "yes" to any question, it does not necessarily mean your child should not be vaccinated. It just means additional questions must be asked. If a question is not clear, please ask your healthcare provider to explain it.

	Yes	No	Don't Know
1. Is the child sick today?	☐	☐	☐
2. Does the child have allergies to medications, food, or any vaccine?	☐	☐	☐
3. Has the child had a serious reaction to a vaccine in the past?	☐	☐	☐
4. Has the child had a health problem with asthma, lung disease, heart disease, kidney disease, metabolic disease (e.g., diabetes), or a blood disorder?	☐	☐	☐
5. If the child to be vaccinated is between the ages of 2 and 4 years, has a healthcare provider told you that the child had wheezing or asthma in the past 12 months?	☐	☐	☐
6. Has the child had a seizure, brain, or other nervous system problem?	☐	☐	☐
7. Does the child have cancer, leukemia, AIDS, or any other immune system problem?	☐	☐	☐
8. Has the child taken cortisone, prednisone, other steroids, or anticancer drugs, or had radiation treatments in the past 3 months?	☐	☐	☐
9. Has the child received a transfusion of blood or blood products, or been given immune (gamma) globulin or an antiviral drug in the past year?	☐	☐	☐
10. Is the child/teen pregnant or is there a chance she could become pregnant during the next month?	☐	☐	☐
11. Has the child received vaccinations in the past 4 weeks?	☐	☐	☐

Form completed by: _____ Date: _____

Form reviewed by: _____ Date: _____

Did you bring your child's immunization record card with you? **yes** ☐ **no** ☐

It is important to have a personal record of your child's vaccinations. If you don't have a personal record, ask the child's healthcare provider to give you one with all your child's vaccinations on it. Keep this record in a safe place and bring it with you every time you seek medical care for your child. Your child will need this important document for the rest of his or her life to enter day care or school, for employment, or for international travel.

Item #IMM63 (MM)

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Patient name: _____ Date of birth: ____/____/____ (mo.) (day) (yr.)

Screening Questionnaire for Adult Immunization

For patients: The following questions will help us determine which vaccines you may be given today. If you answer "yes" to any question, it does not necessarily mean you should not be vaccinated. It just means additional questions must be asked. If a question is not clear, please ask your healthcare provider to explain it.

	Yes	No	Don't Know
1. Are you sick today?	☐	☐	☐
2. Do you have allergies to medications, food, or any vaccine?	☐	☐	☐
3. Have you ever had a serious reaction after receiving a vaccination?	☐	☐	☐
4. Do you have a long-term health problem with heart disease, lung disease, asthma, kidney disease, metabolic disease (e.g., diabetes), anemia, or other blood disorder?	☐	☐	☐
5. Do you have cancer, leukemia, AIDS, or any other immune system problem?	☐	☐	☐
6. Do you take cortisone, prednisone, other steroids, or anticancer drugs, or have you had radiation treatments?	☐	☐	☐
7. Have you had a seizure, brain, or other nervous system problem?	☐	☐	☐
8. During the past year, have you received a transfusion of blood or blood products, or been given immune (gamma) globulin or an antiviral drug?	☐	☐	☐
9. For women: Are you pregnant or is there a chance you could become pregnant during the next month?	☐	☐	☐
10. Have you received any vaccinations in the past 4 weeks?	☐	☐	☐

Form completed by: _____ Date: _____

Form reviewed by: _____ Date: _____

Did you bring your immunization record card with you? **yes** ☐ **no** ☐

It is important for you to have a personal record of your vaccinations. If you don't have a personal record, ask your healthcare provider to give you one. Keep this record in a safe place and bring it with you every time you seek medical care. Make sure your healthcare provider records all your vaccinations on it.

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Adverse Reactions

Also known as vaccine side effects

Three general categories

- Local
- Systemic
- Allergic

Local

- Pain, swelling, redness at site of injection
- Most common

Systemic (entire body)

- Fever, malaise, headache

Allergic

- Due to vaccine or vaccine component
- Rare

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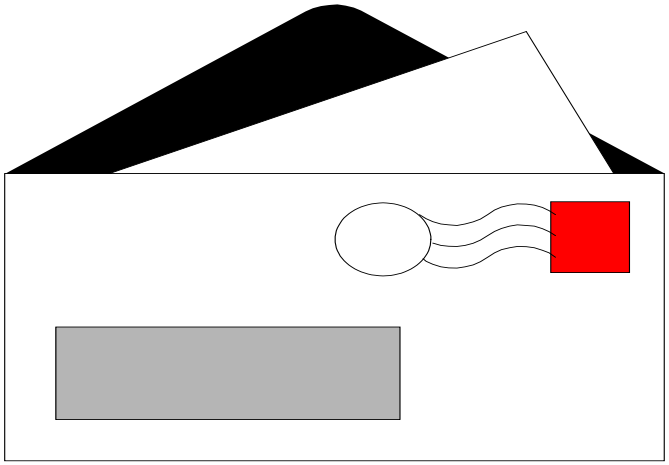
Adverse Event

- Any medical event that occurs following vaccination that needs further investigation to determine if vaccine related
- Can be a true adverse reaction or just a coincidental event
- Must report into VAERS system

VAERS & VAERS Reporting



Vaccine **A**dverse **E**vents **R**eporting **S**ystem

Operated by FDA & CDC

Required to be reported:

- any event in vaccine injury table
- Any clinically significant event occurring after vaccine administration even if unsure if the vaccine caused the event

Anyone can report into the VAERS system

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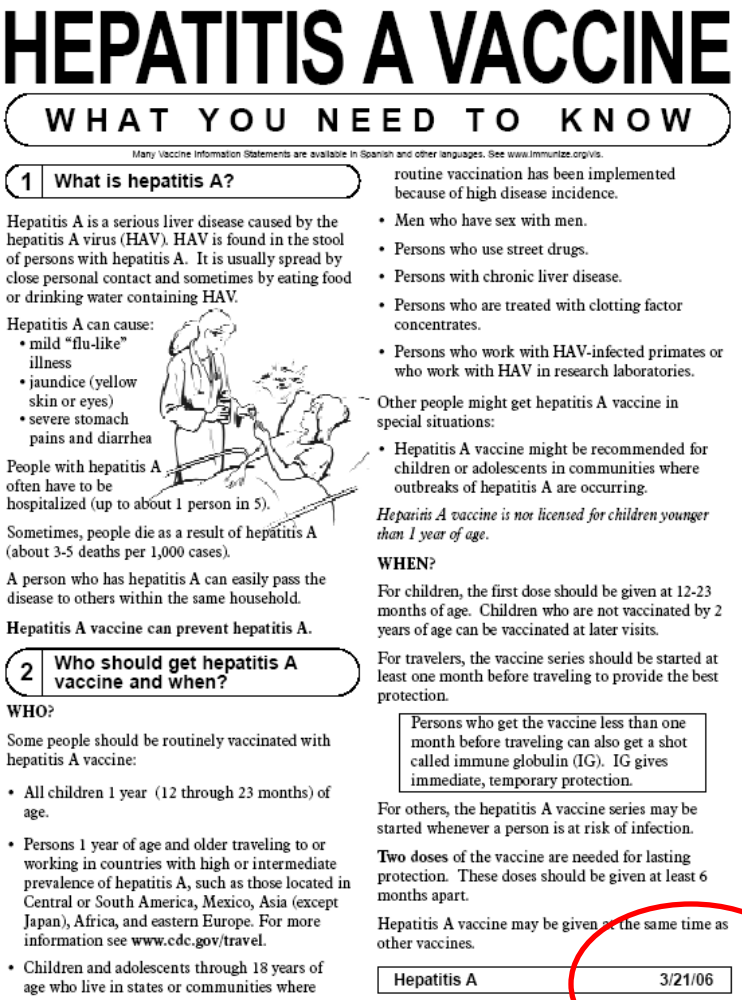
Vaccine Information Statements (VIS)

- Required by law
- Vaccine specific information sheet of risks and benefits
- Must offer a copy to patient, parent or guardian to take home with them
- Available in 30+ languages
- Must record date VIS given, and VIS publication date



HEPATITIS A VACCINE

WHAT YOU NEED TO KNOW

Many Vaccine Information Statements are available in Spanish and other languages. See www.immunize.org/vis.

1 What is hepatitis A?

Hepatitis A is a serious liver disease caused by the hepatitis A virus (HAV). HAV is found in the stool of persons with hepatitis A. It is usually spread by close personal contact and sometimes by eating food or drinking water containing HAV.

Hepatitis A can cause:
- mild "flu-like" illness
- jaundice (yellow skin or eyes)
- severe stomach pains and diarrhea

People with hepatitis A often have to be hospitalized (up to about 1 person in 5).

Sometimes, people die as a result of hepatitis A (about 3-5 deaths per 1,000 cases).

A person who has hepatitis A can easily pass the disease to others within the same household.

Hepatitis A vaccine can prevent hepatitis A.

2 Who should get hepatitis A vaccine and when?

WHO?

Some people should be routinely vaccinated with hepatitis A vaccine:

- All children 1 year (12 through 23 months) of age.
- Persons 1 year of age and older traveling to or working in countries with high or intermediate prevalence of hepatitis A, such as those located in Central or South America, Mexico, Asia (except Japan), Africa, and eastern Europe. For more information see **www.cdc.gov/travel**.
- Children and adolescents through 18 years of age who live in states or communities where routine vaccination has been implemented because of high disease incidence.
- Men who have sex with men.
- Persons who use street drugs.
- Persons with chronic liver disease.
- Persons who are treated with clotting factor concentrates.
- Persons who work with HAV-infected primates or who work with HAV in research laboratories.

Other people might get hepatitis A vaccine in special situations:

- Hepatitis A vaccine might be recommended for children or adolescents in communities where outbreaks of hepatitis A are occurring.

Hepatitis A vaccine is not licensed for children younger than 1 year of age.

WHEN?

For children, the first dose should be given at 12-23 months of age. Children who are not vaccinated by 2 years of age can be vaccinated at later visits.

For travelers, the vaccine series should be started at least one month before traveling to provide the best protection.

Persons who get the vaccine less than one month before traveling can also get a shot called immune globulin (IG). IG gives immediate, temporary protection.

For others, the hepatitis A vaccine series may be started whenever a person is at risk of infection.

Two doses of the vaccine are needed for lasting protection. These doses should be given at least 6 months apart.

Hepatitis A vaccine may be given at the same time as other vaccines.

Hepatitis A	3/21/06

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Immunization Documentation Requirements

- Type of vaccine (DTaP, Tdap, etc.)
- Date vaccine given
- Vaccine manufacturer
- Lot number
- Date VIS given
- VIS publication date
- Address of clinic where vaccine given
- Signature of person administering

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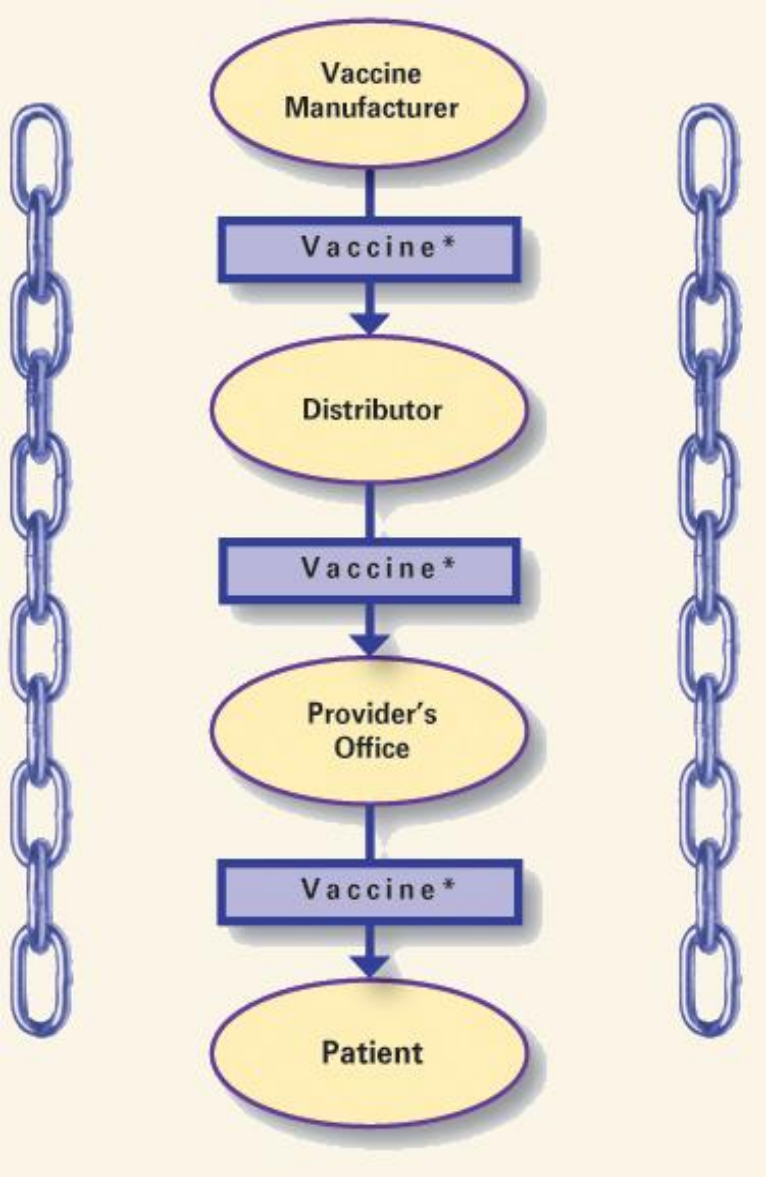
Storage & Handling



Maintaining the Vaccine Cold Chain from the time it leaves the manufacturer to the time it arrives at the provider office and is placed in the refrigerator/freezer is vital to the prevention of vaccine-preventable diseases.

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Safeguarding Vaccines

- One of the most important jobs you will have
- Excessive heat or cold exposure damages vaccine, resulting in loss of potency
- Loss of vaccine potency is very costly and provides little or no protection for your patients

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Safeguarding Vaccines

- Refrigerated vaccines must maintain temperatures between **35-46 degrees F or 2-8 degrees C**
- Freezer vaccines must remain **5 degrees F or -15 degrees C or colder**
- Monitor and record temperatures twice daily
- Some vaccines should not be exposed to light

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Temperature Logs

Temperature Log for Vaccines (Fahrenheit)

Month/Year:_____ **Days 1–15**

Completing this temperature log: Check the temperatures in both the freezer and the refrigerator compartments of your vaccine storage units at least twice each working day. Place an "X" in the box that corresponds with the temperature and record the ambient (room) temperature, the time of the temperature readings, and your initials. Once the month has ended, save each month's completed form for 3 years, unless state or local jurisdictions require a longer time period.

If the recorded temperature is in the shaded zone: This represents an unacceptable temperature range. Follow these steps: 1. **Store the vaccine** under proper conditions as quickly as possible. 2. **Call the vaccine manufacturer(s)** to determine whether the potency of the vaccine(s) has been affected. 3. **Call the immunization program** at your local health department for further assistance: (_____) _____. 4. **Document the action taken** on the reverse side of this log.

Day of Month	1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
Staff Initials																														
Room Temp.																														
Exact Time																														
°F Temp	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm
Too warm - 49°																														
48°	Take immediate action if temperature is in shaded section*																													
47°																														
46°																														
45°																														
44°																														
43°																														
42°																														
41°																														
Aim for 40° 40°																														
39°																														
38°																														
37°																														
36°																														
35°																														
Too cold 34°																														
33°	Take immediate action if temperature is in shaded section*																													
- 32°																														

Refrigerator temperature

Freezer temp																														
Too warm - 8°																														
7°	Take immediate action if temperature is in shaded section*																													
6°																														
5°																														
4°																														
- 3°																														

Adapted by the Immunization Action Coalition courtesy of the Michigan Department of Community Health and the California Department of Health Services.

Technical content reviewed by the Centers for Disease Control and Prevention, Jan. 2007.

www.immunize.org/catg.d/p3039.pdf • Item #P3039 (1/07)

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Vaccines for Children (VFC) Program

- Began in October 1994
- Federally funded vaccines for eligible children
- Eliminates or reduces vaccine cost as a barrier to vaccination
- Available to private and public healthcare providers
- Covers all vaccines recommended by the Advisory Committee on Immunization Practices (ACIP)

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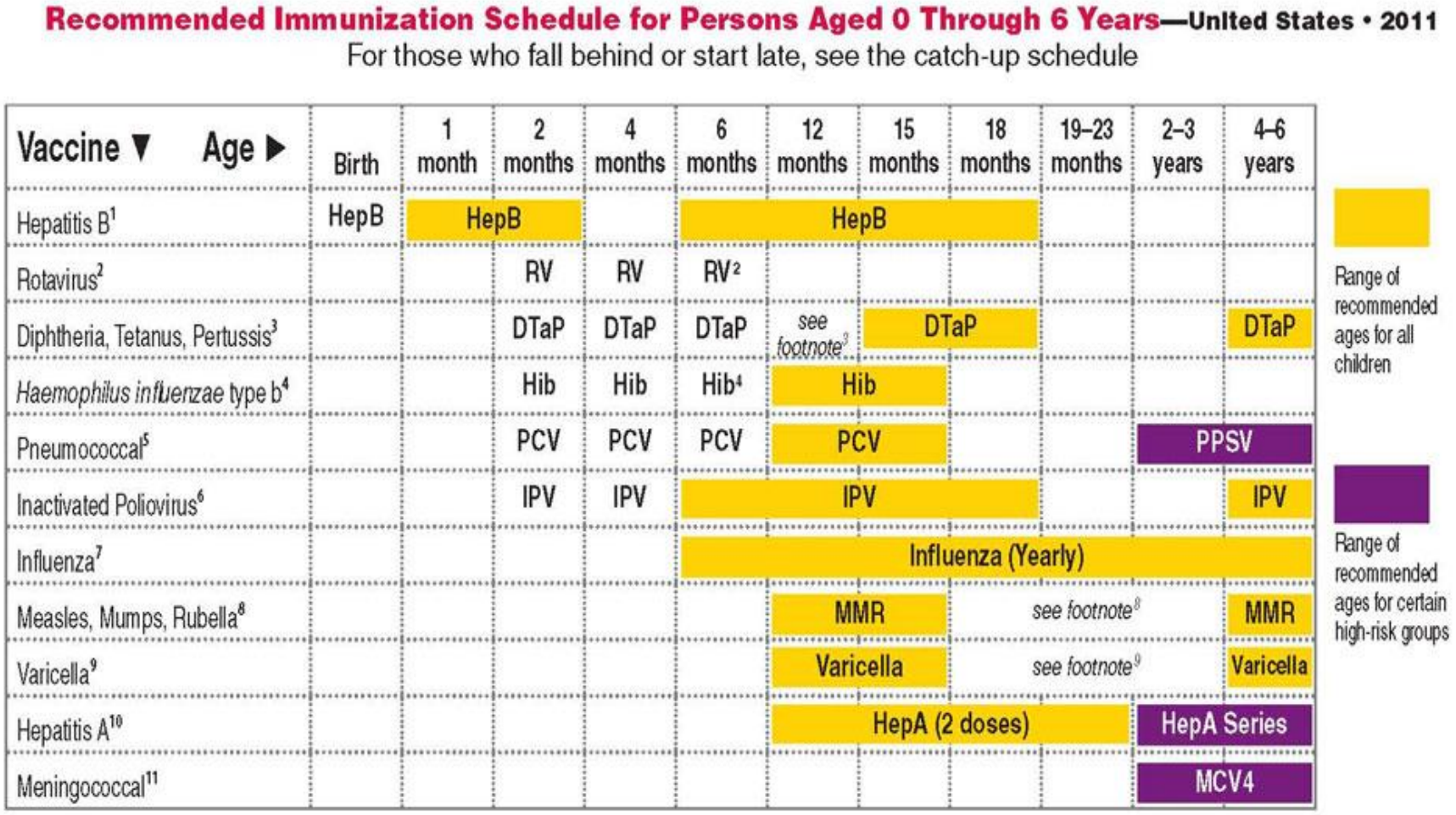
VFC Eligibility

Children, from birth through 18 years of age, who meet at least one of the following criteria:

- Medicaid/KCHIP
- Uninsured
- American Indian or Alaska Native
- Underinsured-child has health insurance that does not cover vaccines

Immunization Recommendations



Recommended Immunization Schedule for Persons Aged 0 Through 6 Years—United States • 2011

For those who fall behind or start late, see the catch-up schedule

Vaccine ▼ Age ▶	Birth	1 month	2 months	4 months	6 months	12 months	15 months	18 months	19–23 months	2–3 years	4–6 years
Hepatitis B[1]	HepB	HepB			HepB						
Rotavirus[2]			RV	RV	RV[2]						
Diphtheria, Tetanus, Pertussis[3]			DTaP	DTaP	DTaP	see footnote[3]	DTaP				DTaP
Haemophilus influenzae type b[4]			Hib	Hib	Hib[4]	Hib					
Pneumococcal[5]			PCV	PCV	PCV	PCV				PPSV	
Inactivated Poliovirus[6]			IPV	IPV	IPV						IPV
Influenza[7]					Influenza (Yearly)						
Measles, Mumps, Rubella[8]						MMR		see footnote[8]			MMR
Varicella[9]						Varicella		see footnote[9]			Varicella
Hepatitis A[10]						HepA (2 doses)				HepA Series	
Meningococcal[11]										MCV4	

Range of recommended ages for all children

Range of recommended ages for certain high-risk groups

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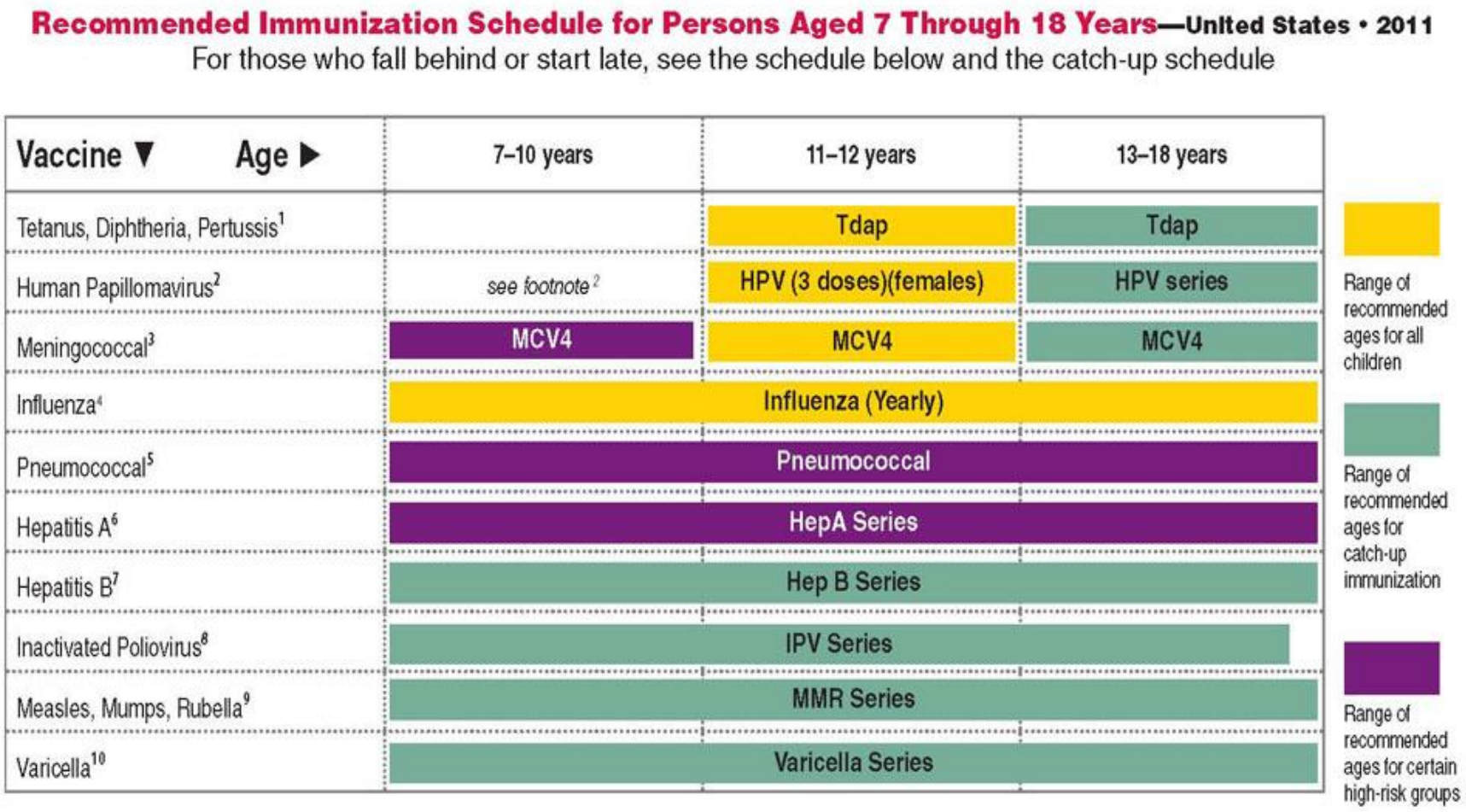
Immunization Recommendations



Catch-up Schedule

Catch-up Immunization Schedule for Persons Aged 4 Months Through 18 Years Who Start Late or Who Are More Than 1 Month Behind—United States • 2011

The table below provides catch-up schedules and minimum intervals between doses for children whose vaccinations have been delayed. A vaccine series does not need to be restarted, regardless of the time that has elapsed between doses. Use the section appropriate for the child's age

PERSONS AGED 4 MONTHS THROUGH 6 YEARS					
Vaccine	**Minimum Age for Dose 1**	**Minimum Interval Between Doses**			
		Dose 1 to Dose 2	Dose 2 to Dose 3	Dose 3 to Dose 4	Dose 4 to Dose 5
Hepatitis B[1]	Birth	4 weeks	8 weeks (and at least 16 weeks after first dose)		
Rotavirus[2]	6 wks	4 weeks	4 weeks[2]		
Diphtheria, Tetanus, Pertussis[3]	6 wks	4 weeks	4 weeks	6 months	6 months[3]
Haemophilus influenzae type b[4]	6 wks	4 weeks if first dose administered at younger than age 12 months 8 weeks (as final dose) if first dose administered at age 12–14 months No further doses needed if first dose administered at age 15 months or older	4 weeks[4] if current age is younger than 12 months 8 weeks (as final dose)[4] if current age is 12 months or older and first dose administered at younger than age 12 months and second dose administered at younger than 15 months No further doses needed if previous dose administered at age 15 months or older	8 weeks (as final dose) This dose only necessary for children aged 12 months through 59 months who received 3 doses before age 12 months	
Pneumococcal[5]	6 wks	4 weeks if first dose administered at younger than age 12 months 8 weeks (as final dose for healthy children) if first dose administered at age 12 months or older or current age 24 through 59 months No further doses needed for healthy children if first dose administered at age 24 months or older	4 weeks if current age is younger than 12 months 8 weeks (as final dose for healthy children) if current age is 12 months or older No further doses needed for healthy children if previous dose administered at age 24 months or older	8 weeks (as final dose) This dose only necessary for children aged 12 months through 59 months who received 3 doses before age 12 months or for children at high risk who received 3 doses at any age	
Inactivated Poliovirus[6]	6 wks	4 weeks	4 weeks	6 months[6]	
Measles, Mumps, Rubella[7]	12 mos	4 weeks			
Varicella[8]	12 mos	3 months			
Hepatitis A[9]	12 mos	6 months			
PERSONS AGED 7 THROUGH 18 YEARS					
Tetanus, Diphtheria/ Tetanus, Diphtheria, Pertussis[10]	7 yrs[10]	4 weeks	4 weeks if first dose administered at younger than age 12 months 6 months if first dose administered at 12 months or older	6 months if first dose administered at younger than age 12 months	
Human Papillomavirus[11]	9 yrs	Routine dosing intervals are recommended (females)[11]			
Hepatitis A[9]	12 mos	6 months			
Hepatitis B[1]	Birth	4 weeks	8 weeks (and at least 16 weeks after first dose)		
Inactivated Poliovirus[6]	6 wks	4 weeks	4 weeks[6]	6 months[6]	
Measles, Mumps, Rubella[7]	12 mos	4 weeks			
Varicella[8]	12 mos	3 months if person is younger than age 13 years 4 weeks if person is aged 13 years or older			

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Recommended vs. Required

- Recommended (standard of care)
  - Immunizations that should be given to all children at the indicated age unless a contraindication or precaution is present.
- Required (legal requirement)
  - Immunizations required by state law for children in childcare or school settings

Kentucky Administrative Regulation

902 KAR 2:060

Immunization schedules for attending day care centers, certified family child care homes, other licensed facilities which care for children, preschool programs, and public and private primary and secondary schools.

Immunization Certificates

- Kentucky has 4 Immunization certificates/exemptions
- Need to be completely filled out with an expiration date, signature and clinic address
- Can be signed by a medical doctor or osteopathic doctor(MD or DO), APRN, pharmacist, LHD administrator or nurse designee

Immunization Certificates

Regular Certificate

- Used when the child is current on immunizations for one year or more

Provisional Certificate

- Used when child will need immunizations in less than one year

Medical Exemption

- Use for medical exempt only
- Will have an expiration date

Religious Exemption

- Use only for religious purposes
- Will not have an expiration date

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Epidemiology and Prevention of Vaccine-Preventable Diseases

- The Pink Book
- Excellent resource
- Available for purchase or on-line
- Web link on Website Resources handout

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Immunization Education

- Epidemiology and Prevention of Vaccine-Preventable Diseases Immunization modules
  - Pink Book is the course manual
- CDC Immunization Update held annually
- You Call the Shots: CDC Web-based training
- CDC's Storage & Handling Toolkit

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Immunization Updates

Keep yourself up-to-date on new immunization information:

Immunization Action Coalition's weekly Email Newsletter can help:

IAC Express

Sign up at www.immunize.org

Vaccine Skepticism

Addressing Parents' Concerns on Vaccinations

- Trust is the Key
- Educate with knowledge and confidence
- Provide parents with reliable resources
  - Vaccine Safety Resources handout

Contact Information

For Immunization Questions

Contact:

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